Contents Volumes 203 – 204

PREFACE 1

DANIEL ALPAY AND VLADIMIR BOLOTNIKOV (Beer-Sheva, Israel)
On a General Moment Problem and Certain Matrix Equations. 3

A. C. ANTOULAS (Houston, Texas)
A New Approach to Modeling for Control 45

J. A. BALL (Blacksburg, Virginia), M. A. KAASHOEK (Amsterdam, the Netherlands), G. GROENEWALD (Bellville, South Africa), AND J. KIM (Kwangju, Korea)
Column Reduced Rational Matrix Function With Given Null-Pole Data in the Complex Plane 67

JOSEPH A. BALL (Blacksburg, Virginia), MAREK RAKOWSKI, AND BOSTWICK F. WYMAN (Columbus, Ohio)
Coupling Operators, Wedderburn-Forney Spaces, and Generalized Inverses 111

WU BAOWEI (Xian, Shaanxi, People's Republic of China)
Some Properties of Linear Systems Defined Over a Commutative Banach Algebra 139

TIBOR BOROS, ALI H. SAYED, AND THOMAS KAILATH (Stanford, California)
Structured Matrices and Unconstrained Rational Interpolation Problems . .155

ROGER BROCKETT (Cambridge, Massachusetts)
Differential Equations and Matrix Inequalities on Isospectral Families . . .189

CHIN CHANG AND TRYPHON T. GEORGIOU (Minneapolis, Minnesota)
Geometric Aspects of the Carathéodory Extension Problem. 209

GUANRONG CHEN (Houston, Texas) AND ÇETIN KAYA KOÇ (Corvallis, Oregon)
Computing Matrix-Valued Nevanlinna-Pick Interpolation 253

GONG-NING CHEN AND HUI-PIN ZHANG (Beijing, China)
More on Loewner Matrices. 265

CARMEN COLL, RAFAEL BRU, ELENA SÁNCHEZ, AND VICENTE HERNÁNDEZ (Valencia, Spain)
Discrete-Time Linear Periodic Realization in the Frequency Domain 301

RUTH F. CURTAIN AND ALEJANDRO RODRÍGUEZ (Groningen, the Netherlands)
Necessary and Sufficient Conditions for J-Spectral Factorizations With a J-Lossless Property for Infinite-Dimensional Systems in Continuous and Discrete Time 327

LEONID FAYBUSOVICH (Notre Dame, Indiana)
Rational Functions, Toda Flows, and LR-like Algorithms 359

AVRAHAM FEINTUCH (Beer-Sheva, Israel)
Strong Graph Representations for Linear Time-Varying Systems 385

SVEN FELDMANN (Stuttgart, Germany) AND GEORGE HEINIG (Leipzig, Germany)
Uniqueness Properties of Minimal Partial Realizations 401

MICHEL FLIESS (Gif-sur-Yvette, France)
Une Interprétation Algébrique de la Transformation de Laplace et des Matrices de Transfert 429

CIPRIAN FOIAS (Bloomington, Indiana), ARTHUR FRAZHO (West Lafayette, Indiana), AND ALLEN TANNENBAUM (Haifa, Israel)
On Combined $H^\infty - H^2$ Suboptimal Interpolants 443

P. A. FUHRMANN (Beer-Sheva, Israel)
A Duality Theory for Robust Stabilization and Model Reduction 471

HISAYA FUJIOKA AND SHINJI HARA (Yokohama, Japan)
State Covariance Assignment Problem With Measurement Noise: A Unified Approach Based on a Symmetric Matrix Equation 579

TON GEERTS (Tilburg, the Netherlands)
Linear-Quadratic Control With and Without Stability Subject to General Implicit Continuous-Time Systems: Coordinate-Free Interpretations of the Optimal Costs in Terms of Dissipation Inequality and Linear Matrix Inequality: Existence and Uniqueness of Optimal Controls and State Trajectories 607

TOMOMICHI HAGIWARA AND MITUHIKO ARAKI (Kyoto, Japan)
A Successive Optimal Construction Procedure for State Feedback Gains . .659

AUTHOR INDEX 674